APTITUDE TEST, 2012

Question Numbers 1 - 30 carry 3 (three) marks each and
question numbers 31-40 carry 1 (one) mark each.

Full Marks : 100

Time : One Hour

1. Find the greatest number that will divide 43, 91 and 183 so as to leave the same remainder in each case.

   (A) 4

   (B) 7

   (C) 9

   (D) 13

2. A worker suffers a 20% cut in wages. He regains his original pay by obtaining a rise of

   (A) 20%

   (B) 22.5%

   (C) 25%

   (D) 27.5%

3. The ratio of two numbers is 3 : 4 and their H.C.F. is 4. Their L.C.M. is:

   (A) 12

   (B) 16

   (C) 24

   (D) 48

4. If 20 men can do a job in 10 days the number of days in which 25 men can do the job is

   (A) 8 days

   (B) 4 days

   (C) 12.5 days

   (D) 5 days

5. A man completes a journey in 10 hours. He travels first half of the journey at the rate of 21 km/hr and second half at the rate of 24 km/hr. Find the total journey in km.

   (A) 220 Km

   (B) 224 Km

   (C) 230 Km

   (D) 234 Km

6. What will be the ratio of simple interest earned by certain amount at the same rate of interest for 6 years and that for 9 years?

(A) 1 : 3

(B) 1 : 4

(C) 2 : 3

(D) data inadequate

7. The difference between simple and compound interests compounded annually on a certain sum of money for 2 years at 4% per annum is Re. 1. The sum (in Rs) is:

(A) 625

(B) 630

(C) 640

(D) 650

8. Tickets numbered 1 to 20 are mixed up and then a ticket is drawn at random. What is the probability that the ticket drawn has a number which is a multiple of 3 or 5?

(A) 1/2

(B) 2/5

(C) 8/15

(D) 9/20

9. A train 240 m long passes a pole in 24 seconds. How long will it take to pass a platform 650 m long?

(A) 65 sec

(B) 89 sec

(C) 100 sec

(D) 150 sec

10. Which of the following numbers does not match in the sequence?

8, 27, 64, 100, 125, 216, 343

(A) 27

(B) 100

(C) 125

(D) 343

11. Four-person crew from Classic Colors is painting Mr. Mitra's house. Panchu is painting the front of the house. Bikash is in the alley behind the house painting the back. Bakshi is painting the window frames on the north side, Bibhu is on the south. If Panchu switches places with Bakshi, and Bakshi then switches places with Bibhu, where is Bibhu?

(A) In the alley behind the house

(B) On the north side of the house

(C) In front of the house

(D) On the south side of the house

12. M, N, P and Q are four real numbers. It is known that $M > Q$, $N = Q^2$ and $Q = P^2$. If $M = \pi/4$ then which one of the following is correct?

(A) $M > Q$ and $Q > N$ and $Q < P$

(B) $M > Q$ and $N > Q$ and $Q > P$

(C) $M > Q$ and $N > Q$ and $Q < P$

(D) $M > Q$ and $Q > N$ and $Q > P$

13. As they prepare for the state championships, one gymnast must be moved from the Level 2 team to the Level 1 team. The coaches will move the gymnast who has won the biggest prize and who has the most experience. In the last competition, Roberta won a bronze medal and has competed seven times before.

Jamie has won a silver medal and has competed fewer times than Roberta. Beth has won a higher medal than Jamie and has competed more times than Roberta. Michele has won a bronze medal, and it is her third time competing. Who will be moved to the Level 1 team?

(A) Roberta

(B) Beth

(C) Michele

(D) Jamie

14. Look at this sequence

|♣|♦|♥|♠|♦♣|♦♦|♦♥|♦♠| __ |...

Which of the following options should fill the blank ?

(A) ♣♣

(B) ♥♣

(C) ♣♦

(D) ♥♦

15. Four defensive football players are chasing the opposing wide receiver, who has the ball. Chuni is directly behind the ball carrier. Balaram and Surajit are side by side behind Chuni. Baichung is behind Balaram and Surajit. Chuni tries for the tackle but misses and falls. Surajit trips. Which defensive player tackles the receiver?

(A) Surajit

(B) Baichung

(C) Balaram

(D) Chuni

16. A salesman sold two commodities at Rs12 each. His profit on one was 20% and the loss on the other was 20%. Then on the whole, he

(A) lost Re 1

(B) gained Re 1

(C) neither gained nor lost

(D) lost Rs 2

17. Ms. Ali likes to let her students choose who their partners will be; however, no pair of students may work together more than seven class periods in a row. Pintu and Lalu have studied together seven class periods in a row. Pradip and Bidyut have worked together three class periods in a row. Pradip does not want to work with Pintu. Who should be assigned to work with Lalu?

(A) Pradip

(B) Pintu

(C) Bidyut

(D) can not be ascertained

18. Which of the following numbers does not match in the sequence?

396, 462, 572, 427, 671, 264

(A) 396

(B) 427

(C) 671

(D) 264

19. In one hour, a boat goes 11 km/hr along the stream and 5 km/hr against the stream. The speed of the boat in still water (in km/hr) is:

(A) 3 km/hr

(B) 5 km/hr

(C) 8 km/hr

(D) 9 km/hr

20. Students of Class VII are divided into two sections. Section A includes 60 students while the strength of section B is only 40. The average mathematics marks in section A is 60 and that in B is 80. The overall average is

(A) 68

(B) 70

(C) 72

(D) $\sqrt{4800}$

21. A man invests Rs10,000 for a year. Of this Rs 4000 is invested at the interest rate of 5% per year, Rs 3500 at 4% per year and the rest at X% per year. His total interest for the year is Rs 500. Then X equals

(A) 6.2

(B) 6.3

(C) 6.4

(D) 6.5

22. The greatest possible length which can be used to measure exactly the lengths 7 m, 3 m 85 cm, 12 m 95 cm is:

(A) 15 cm

(B) 25 cm

(C) 35 cm

(D) 42 cm

23. The sum of ages of 5 children born at the intervals of 3 years each is 50 years. What is the age of the youngest child?

(A) 4 years

(B) 8 years

(C) 10 years

(D) None of these

24. A number N is greater than M-8 and less than P-4. If for the given values of M and P, N has the unique solution equal to 15 then

(A) M = 22 and P = 20

(B) M = 21 and P = 20

(C) M = 22 and P = 21

(D) M = 21 and P = 21

P > N > M

M + 8 = N

P - 4 = N

M + 8 = P - 4.

22 + 20

14 14

(7)

M = 23

M - 8 = 15

P + 4 = 15

25. Nurse Kemp has worked more night shifts in a row than Nurse Rogers, who has worked five. Nurse Miller has worked fifteen night shifts in a row, more than Nurses Kemp and Rogers combined. Nurse Calvin has worked eight night shifts in a row, less than Nurse Kemp. How many night shifts in a row has Nurse Kemp worked?

(A) eight

(B) nine

(C) ten

(D) eleven

26. Mrs. Carson took a taxi to meet her three friends for lunch. They were waiting for her outside the restaurant when she pulled up in the car. She was so excited to see her friends that she left her tote bag in the taxi. As the taxi pulled away, she and her friends took notice of the license plate number so they would be able to identify the car when they called the taxi company. The four license plate numbers below represent what each of the four women thinks she saw. Which one is most likely the license plate number of the taxi?

(A) JXK 12L

(B) JYK 12L

(C) JXK 12I

(D) JXX 12L

27. The difference between a two-digit number and the number obtained by interchanging the positions of its digits is 36. What is the difference between the two digits of that number?

(A) 3

(B) 4

(C) 9

(D) None of the above

28. A number consists of two digits. If the digits interchange places and the new number is added to the original number, then the resulting number will be divisible by:

(A) 3

(B) 5

(C) 9

(D) 11

29. A right angled triangle with sides 3 cm, 4 cm and 5 cm is rotated on the side of 3 cm to form a cone. The volume of the cone so formed is:

(A) 12 πcm^3

(B) 15 π cm^3

(C) 16 π cm^3

(D) 20 π cm^3

30. A hall is 15 m long and 12 m broad. If the sum of the areas of the floor and the ceiling is equal to the sum of the areas of four walls, the volume of the hall is:

(A) 720

(B) 900

(C) 1200

(D) 1800

31. The day before the day before yesterday is three days after Saturday. What day is today?

(A) Tuesday

(B) Wednesday

(C) Thursday

(D) Friday

32. At the end of a banquet 10 people shake hands with each other. How many handshakes will there be in total?

(A) 100

(B) 20

(C) 45

(D) 50

33. Look at this series: 3, 4, 7, 8, 11, 12, . . . What number should come next?

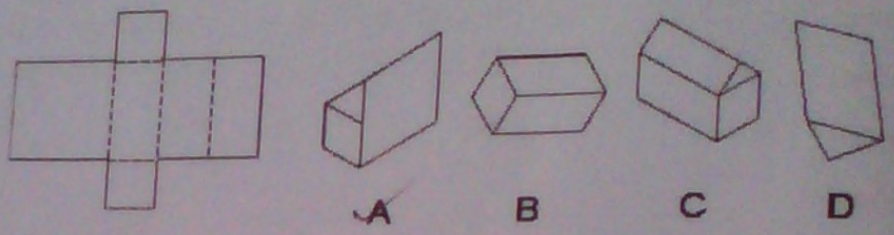
(A) 7

(B) 10

(C) 14

(D) 15

34. Which diagram results from folding the diagram on the left?



35. Which lamp is the brightest? Given that

- Lamp A is less bright than Lamp B
- Lamp B is brighter than Lamp C
- Lamp C is as bright as Lamp D
- Lamp D is brighter than Lamp A

(A) Lamp A

(B) Lamp B

(C) Lamp C

(D) Lamp D

36. At the baseball game, Henry was sitting in seat 253. Marla was sitting to the right of Henry in seat 254. In the seat to the left of Henry was George. Inez was sitting to the left of George. Which seat is Inez sitting in?

(A) 251

(B) 254

(C) 255

(D) 256

37. To write 1 through 100 (both inclusive) we need to write N number of 1s. The value of N is

(A) 20

(B) 21

(C) 9

(D) 10

38. Two students appeared at an examination. One of them secured 9 marks more than the other and his marks was 56% of the sum of their marks. The marks obtained by them are:

(A) 39, 30

(B) 41, 32

(C) 42, 33

(D) 43, 34

39. The percentage increase in the area of a rectangle, if each of its sides is increased by 20% is:

(A) 40%

(B) 42%

(C) 44%

(D) 46%

40. 3 pumps, working 8 hours a day, can empty a tank in 2 days. How many hours a day must 4 pumps work to empty the tank in 1 day?

(A) 32/6

(B) 10

(C) 6

(D) 12

Note : Marks allotted for

- Question No. 1 – 30 are 3 Marks each
- Question No. 31 – 40 are 1 Mark each